Stitch Guide

Most Common Stitch Types in ASTM D-6193 and ISO 4915:1991 Standards

This quick reference guide is to help communication between designers, production managers and sewing contractors. The guide is freely distributed.


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**ISO**

101 Chainstitch

Stitch formed by a needle thread passing through the material and interlooping with itself on the underside of the seam.

103 Blindstitch

Stitch is formed with one needle thread which interloops with itself on the top surface of the material. The thread passes through the top ply and horizontally through portions of the bottom ply.

104 Blindstitch

One thread Blindstitch for hemming. See page 4

301 Lockstitch

Stitch formed by a needle thread passing through the material and interlocking with a bobbin thread. Threads are meeting in the center of the seam. Stitch appear the same on the top as well as the bottom.

301 Twin Needle Lockstitch

Same as 301 except that two rows of stitch are formed. Common needle spacing is 1/4” (6mm) however, the machines are available from 3/16” up to 1” (6-25mm)

304 Zig Zag

Lockstitch is formed with a needle and bobbin thread forming a symmetrical zig zag pattern. This stitch is also used in bartacking and lockstitch button sewing and button holing.

401 Chainstitch

Stitch formed by 1 needle thread and being interlooped with 1 looper thread that is set on the underside of the seam.

401 Twin Needle Chainstitch

Stitch formed by 2 needle threads being interlooped with 2 looper threads, forming 2 independent rows of stitch set.

406 Bottom Coverstitch

Stitch formed by 2 needle threads passing through the material and interlooping with 1 looper thread with the stitch set on the underside of the seam. Looper thread interlooped between needle threads, providing seam coverage on the bottom side.

407 Bottom Coverstitch

Stitch formed by 3 needle threads passing through the material and interlacing with 1 looper thread with the stitch set on the underside of the seam. Looper thread is interlooped between needle threads, providing seam coverage on the bottom side only.
ISO# 503 Overedge
Formed by 1 needle thread and 1 looper thread producing a purl on the edge of the seam. Use: serging or blindhemming.

ISO# 504 Overedge
Formed by 1 needle thread and 2 looper threads producing a purl on the edge of the seam. Use: overedge seaming and serging.

ISO# 505 Overedge
Formed by 1 needle thread and 2 looper threads forming a double purl on the edge of the seam. Use: serging

ISO# 512 Overedge
Stitch formed with 2 needle threads and 2 looper threads with the looper threads forming a purl on the edge of the seam. 512-right needle only enters the upper looper loop.

ISO# 514 Overedge
Formed with 2 needle threads and 2 looper threads with the looper threads forming a purl on the edge of the seam. 514-both needles enter the upper looper loop.

ISO# 516 Safety Stitch
5-thread safety stitch. Combining a single-needle chainstitch (401) and a 3-thread overedge stitch (504) that are formed simultaneously.

ISO# 602 Coverstitch
Formed with 2-needle threads, a top cover thread and a bottom looper thread.

ISO# 605 Coverstitch
Formed with 3-needle threads, using a top cover thread and a bottom looper thread.

ISO# 607 Coverstitch
Formed with 4-needle threads, a top cover thread and a bottom looper thread.
**ASTM D-6193**

104 Blindstitch
One thread Blindstitch for hemming.

202 Handstitch
Chainstitch provides stretchability for knits.

205 Handstitch
One Thread True Handstitch for Topstitching.

306 Blindstitch
Two Thread blindstitch.

315 Three Step Zig-Zag
Lockstitch zig-zag with more stretch.

316 Lockstitch
One Thread lockstitch using autoloading bobbin.

502 Overedgestitch
One needle overedge stitch used for serging.

515 True Safetystitch
Chainstitch provides stretchability for knits.

**ASTM D-6193 Stitches Not shown in This guide**

102 One Thread
105 One Thread
201 Two Thread
203 One Thread
204 One Thread
302 Three Thread
303 Four Thread
305 Three Thread
307 Five Thread
308 Two Thread
309 Three Thread
310 Three Thread
311 Three Thread
312 Three Thread
313 Two Thread
314 Two Thread
402 Three Thread
403 Four Thread
404 Two Thread
405 Three Thread
407 Four Thread
501 One Thread
505 Three Thread
506 Four Thread
507 Four Thread
508 Three Thread
509 Three Thread
510 Two Thread
511 Two Thread
517 Five Thread
518 Four Thread
519 Six Thread
520 Eight Thread
521 Three Thread
522 Four Thread
601 Three Thread
603 Five Thread
604 Six Thread
606 Nine Thread
**Buttonholes**
Photos: Juki

- Single Stitched
- Double Stitched
- Purl Stitching
- Whip Stitching
- Keyhole Buttonhole

**Button Stitches**

- Cross Stitch
- Four Hole Stitch
- Two Hole Stitch

**Label Tacking, Webbing Attachment**
Types of Overlock Stitches

Overlock stitches are classified in a number of ways. The most basic classification is by the number of threads used in the stitch. Industrial overlock machines are generally made in 1, 2, 3, 4, or 5 thread formations. Each of these formations has unique uses and benefits: 1-thread formations are used for end-to-end seaming, or “butt-seaming”. Two- and three-thread formations, also known as ‘merrowing’, are the most common, used for edging and seaming, especially on knits and wovens. Four-thread formations are called mock safety stitches and create extra strength while retaining flexibility. 5-thread formations, which utilize 2 needles, are called safety stitches, creating a very strong seam used for apparel manufacturing.

Overlocking is also referred to as “overedging”, “merrowing” or “serging”. Though “serging” technically refers to overlocking with cutters, in practice the four terms are used
Crochet Shell Stitches

22-FJ Large Shell

22-FJ

27-FJ

27FJ

35-FJ Small Shell

35-FJ

Crochet Stitches

15-CA-1

17-F

18-A

18-E

18-G

18-S